

Wednesday, April 29, 2015 10:55:59 AM

132158

Page 1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Wearplate Fwd

Stop *NS2*

Start Date: 4/30/15 **Start Qty:** 8.00

8

Cust Item ID:

Required Date: 5/08/15 Req'd Qty: 8.00

g

Customer:

Reference:

Approvals:

Process Plan:

Date: 5-4-29

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4918	A								
100		0.00							
100	FLOW WATER JET								
Waterjet									
FLOW CNC Waterjet	Memo	0.00							
	1-Cut as per Dwg								
	Dwg Rev: <u>A</u>								
	Prog Rev: <u>A</u>								
	2-Deburr if necessary								
110		0.00							
110	QC2- Inspect parts off machine FAI/FAIB								
QC									
Quality Control	Memo	0.00							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

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Work Order update only ☐

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				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

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Page 3

Item ID: D4918-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
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Start Date: 4/30/15 Start Qty: 8.00 ***8*** Cust Item ID:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
150	<i>M 130 746.</i>					<i>9</i>	<i>15.5.13</i>		DAS 34 4-28
Powdercoat	Memo	0.00							
Powder Coating	START TIME: <i>10:35</i> FINISH TIME: <i>11:05.</i> OVEN TEMPERATURE:								
160	QC3- Inspect Part Finish	0.00							
160						<i>9</i>			DAS 05 15-05-13
QC	Memo	0.00							
Quality Control									
164		0.00							
164						<i>9</i>			<i>CN 15-05-14</i>
HandFinish	Memo	0.00							
Hand Finishing	Coat entire top concave surface with Rockguard as per dwg and QSI A/R Rockguard: <i>131816</i>								

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
166	QC5- Inspect part completeness to step on W/O	0.00							DAS 38 9-89
166									
QC	Memo	0.00							
Quality Control									MAY 14 2015
170	Identify as per dwg & Stock Location: <u>FP-001</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging	LOCATION : FP001								
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									MAY 15 2015

X9 d 9/15/05/1.1

ML5 MAY 15 2015

ML5 MAY 15 2015

DQA: _____ Date: _____



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Picklist Print

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Parent Item: D4918-1

D4918-1

Parent Item Name: Wearplate Fwd

Start Date: 4/30/15

Required Date: 5/08/15

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP REV:A 13.12.09 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S20GA

Purchased

No

100

sf

241.6623

0.242

3

M304S20GA

JMIS-4-30

304/316 .040 Sheet

Location

Loc Qty

Loc Code

MAT

132.9

m131700

132.9

131700

MAT020

108.7623

m130345

1.5139

m131060

107.2484

DQA: _____ Date: _____

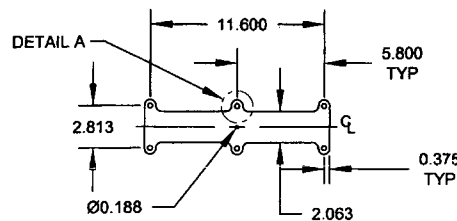


WORK ORDER NON-CONFORMANCE / UPDATE

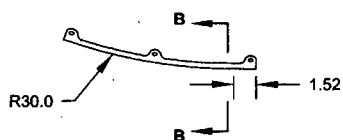
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Work Order update only ☐

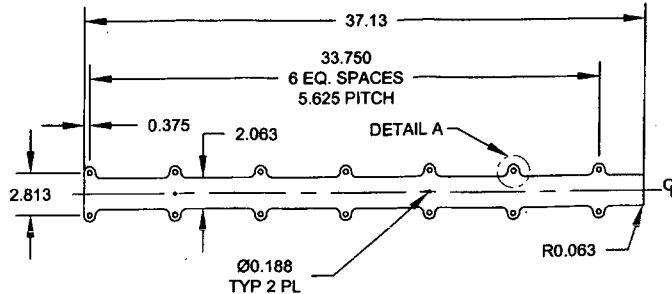
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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								



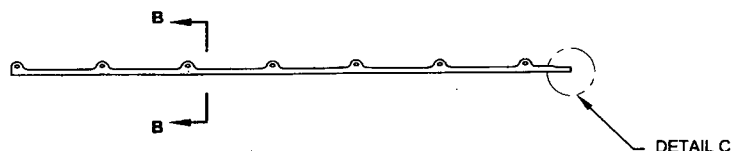
D4918-1F FLAT PATTERN



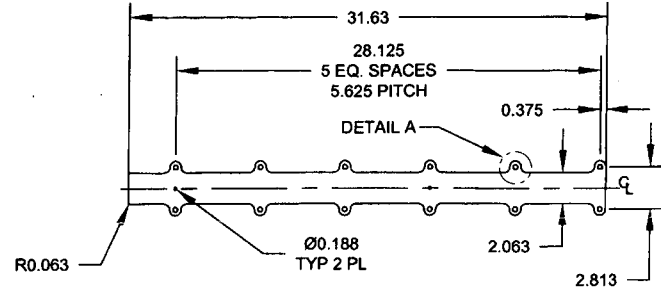
D4918-1 BENDING DETAIL
(MAKE FROM D4918-1F)



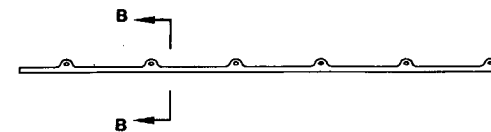
D4918-3F FLAT PATTERN



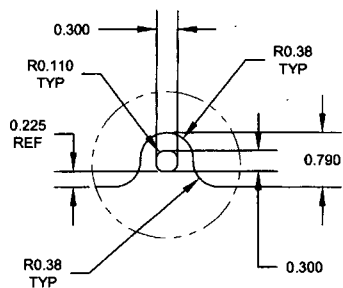
D4918-3 BENDING DETAIL
(MAKE FROM D4918-3F)



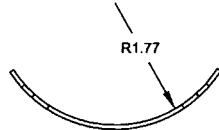
D4918-5F FLAT PATTERN



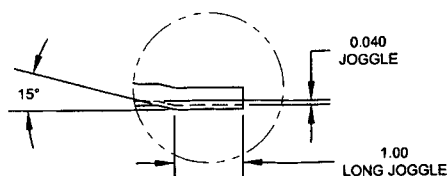
D4918-5 BENDING DETAIL
(MAKE FROM D4918-5F)



DETAIL A
(SCALE 4X)



SECTION B-B
(SCALE 4X)



DETAIL C
(SCALE 4X)

NOTES:

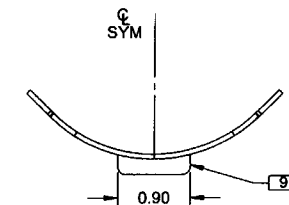
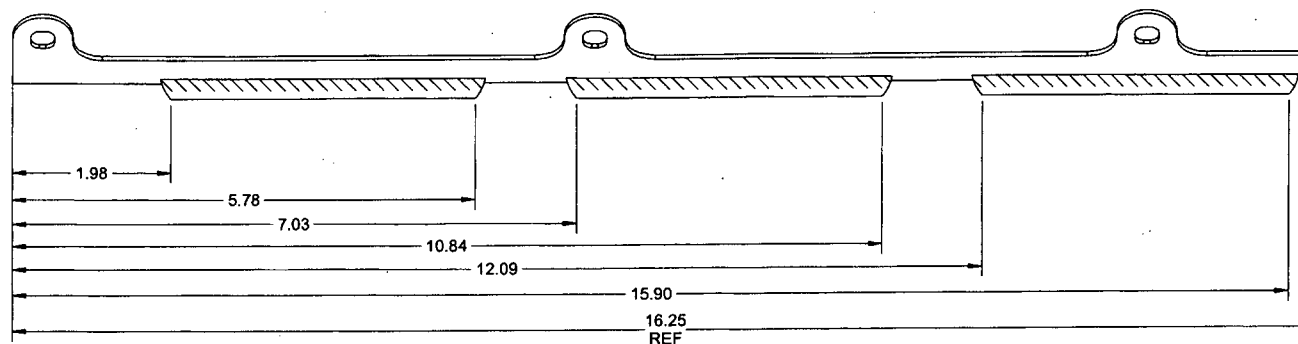
- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK)
(REF. DART MATERIAL SPEC M304S20GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: D4918-1 - 0.47 lbs, D4918-3 - 0.95 lbs, D4918-5 - 0.77 lbs.
- 8) COAT ENTIRE TOP (CONCAVE) SURFACE WITH PLUS ONE ROCKGUARD 4714, 0.020-0.040 THK

RELEASED
2013-12-10

A		NEW ISSUE		DW		13.08.30			
REV.		DESCRIPTION				BY		DATE	
DESIGN		DW		DART AEROSPACE USA, INC					
DRAWN		DW		KENT, WA					
CHECKED		CP		DRAWING NO. D4918				REV. A	
MFG. APPR.		[Signature]		SHEET 1 OF 3					
APPROVED		[Signature]		TITLE WEARPLATE				SCALE	
DE APPR.		[Signature]						NTS	
DATE		13.08.30		COPYRIGHT © 2013 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.					

Handwritten: 15-4-29
132158

ITEM	QTY	P/N	DESCRIPTION
1	X	D4918-047	WEARPLATE
2	1	D4918-7	WEARPLATE
3	A/R	2059B	HARDCOAT



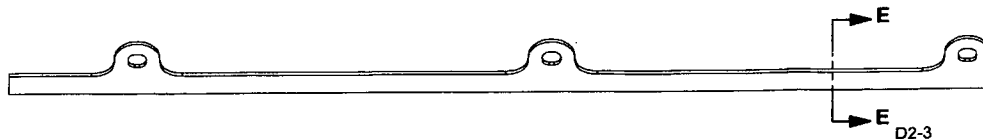
D4918-047 WEARPLATE

NOTES:

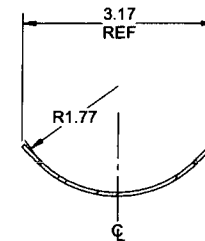
- 1) MATERIAL: PER PARTS LIST
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4918-047" PER QSI 044 6.1
- 7) WEIGHT: 2.18 lbs
- 8) WELD PER QSI 004
- 9) APPLY 2 LAYERS OF 2059B HARDCOAT WELDS TO WITHIN 0.25 OF WEARPAD ENDS 0.19 TO 0.25 THICK UNLESS OTHERWISE INDICATED
- 10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH PLUS ONE ROCKGUARD 4714, 0.020-0.040 THK

RELEASED
2013-12-10

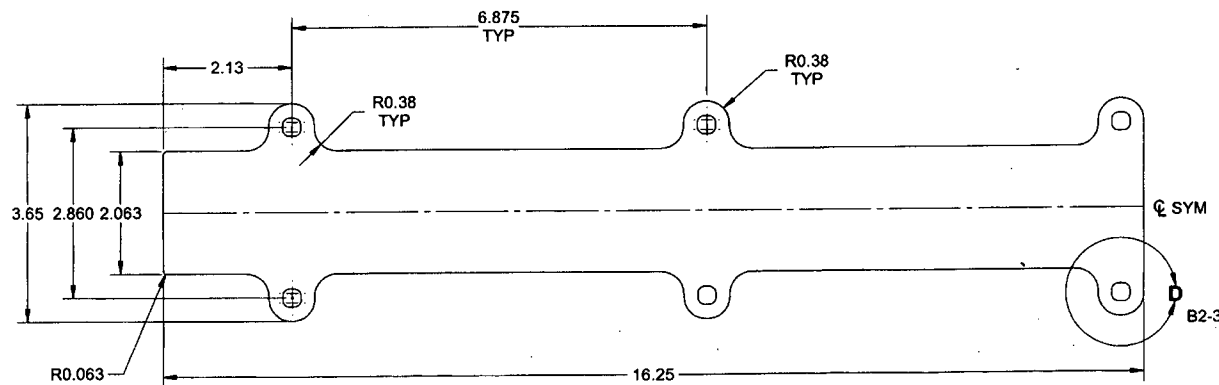
DESIGN	DW	DART AEROSPACE LTD KENT, WA	
DRAWN	DW		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4918	REV. A
MFG. APPR.	<i>[Signature]</i>	TITLE WEARPLATE	SHEET 2 OF 3
APPROVED	<i>[Signature]</i>	SCALE NTS	
DE APPR.	<i>[Signature]</i>	COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	13.08.30		



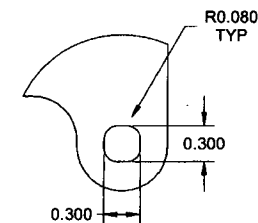
D4918-7 WEARPLATE
(MAKE FROM D4918-7F)



SECTION E-E
SCALE 2X D4-3



D4918-7F WEARPLATE
FLAT PATTERN



DETAIL D
SCALE 2X B4-3

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK), (REF. DART SPEC. M304S16GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.66 lbs

RELEASE
2013-12-13

DESIGN	DW	DART AEROSPACE LTD KENT, WA	
DRAWN	DW		
CHECKED		DRAWING NO. D4918	REV. A
MFG. APPR.			SHEET 3 OF 3
APPROVED		TITLE WEARPLATE	SCALE NTS
DE APPR.		COPYRIGHT © 2013 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	13.08.30		